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EXAMINER

SHEW, JOHN

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/772,645

Applicant(s)

CAVE ET AL.

Examiner

John L Shew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51, 53-83, 86-92 is/are rejected.
- 7) ☒ Claim(s) 52, 84 and 85 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2,3</u> | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

Page 9 line 23 cites "gateway 214" should be "gateway 224".

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott.

Claim 1, Elliott teaches a system for providing an enhanced calling service (FIG. 1) referenced by Data Network 112 in conjunction to Carrier Facility network 126,

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comprising a first network interface providing interfacing of a first communication device to an asynchronous network (FIG. 1, column 5 lines 41-48) referenced by Telephone 120 connected to Gateway Site 110 interfacing to asynchronous Data Network 112 which is an IP based network, wherein said first network interface includes a processor adapted to controllably direct a first media stream associated with said first communication device (FIG. 2A-2, column 5 lines 15-24) referenced by the Gateway Site 110 using a processor of a Network Access Server 230 to originate and terminate the media stream of calls between calling and called parties, to a node in said asynchronous network (FIG. 2A-2, column 5 lines 15-24) referenced by the destination node of a Gateway Site 108 terminating the call and an interactive response process coupled to said asynchronous network (FIG. 6D, column 42 lines 65-67, column 43 lines 6) referenced by Network Interactive Voice Response unit 654 which is coupled to the asynchronous Data Network 112, and adapted to directly utilize packet network protocols (column 43 lines 2-6) referenced by use of packet network protocols IPDC and SR-3511, wherein said interactive response process comprises a processor adapted to accept at least a portion of said first media stream (column 227 lines 9-21) referenced by IVR interface ability to change termination points requires that the first media stream from an originating point must be established, and to provide a media stream in response thereto (column 227 lines 9-21) referenced by IVR interface ability to change media stream termination points based on customer response. Elliott does not teach an IVR adapted to provide control signals to the first network interface to direct the first media stream to a node.

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Elliott teaches a processor adapted to provide control signals to said first network interface (FIG. 6D, Abstract lines 15-24) referenced by Soft Switch 204 providing H.323 control signals to Service Node/IP 656 and Gateway Site 110 to set up calls, to direct at least a portion of said first media stream to a node in said asynchronous network other than said interactive response process (FIG. 2B) referenced by establishing RTP media stream between originating Trunking Gateway 232 and terminating Trunking Gateway 234.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Network IVR processor into the Soft Switch processor of Elliott for the purpose of consolidating functions and ease of maintenance.

Claims 2-9, Elliott teaches an enhanced calling service comprises a call payment service (FIG. 6C, column 42 lines 55-59, column 224 lines 19-22) referenced by a Calling Card IVR which requests payment information via a calling card identification or credit card identification. Elliott teaches at least a portion of said first media stream accepted by said interactive response process and said media stream (FIG. 6C) referenced by media connection between Gateway Site 110 and Calling Card IVR 632, provided in response to said first media stream comprises an interactive dialogue between said first communication device and said interactive process including dialogue with respect to payment of a call (FIG. 6C, column 223 lines 9-16) referenced by operator services for calling card service which interacts to obtain the calling card identification for call payment. Elliott teaches at least a portion of said first media stream

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accepted by said interactive response process and said media stream provided in response to said first media stream (FIG. 6C) referenced by the first media stream between Gateway Site 110 and Calling Card IVR 632, comprises an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to a desired communication device with which said first communication device is to communicate (column 227 lines 9-21) referenced by customer change of termination points through the IVR system so the call is re-routed to a different terminating called number. Elliott teaches said node in said asynchronous network other than said interactive response process is associated with a called party (FIG. 2A-1, FIG. 2A-2, column 227 lines 9-21) referenced by Soft Switch 204 re-route of terminating number obtained from the IVR to a different Gateway Site which accesses the new called party number. Elliott teaches the node in said asynchronous network other than said interactive response process (FIG. 2A-2) referenced by terminating Gateway Site 108, comprises a second network interface providing interfacing of a second communication device to said asynchronous network (FIG. 2A-2) referenced by terminating Gateway Site 108 connected to asynchronous Data Network 112, wherein said second network interface includes a processor (FIG. 2A-2) referenced by processor Network Access Server 228, adapted to controllably direct a second media stream associated with said second communication device to said first network interface under control of said processor of said interactive response process (FIG. 24A) referenced by Soft Switch Site 106 controlling connection of first media stream from GWS 110 to second media stream of GWS 108 for a called party number termination at

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telephone 102. Elliott teaches call payment service comprises a prepaid calling service (column 42 lines 56-59, column 223 lines 13-16) referenced by prepaid calling card service using IVR for operator services. Elliott teaches call payment service comprises a postpaid calling service (column 224 lines 19-22) referenced by calling card service through the use of a credit card which is a method of post payment. Elliott teaches call payment service comprises a collect calling service (column 42 lines 56-59, column 223 lines 9-12) referenced by IVR operator services including collect calls.

Claims 10-17, Elliott teaches enhanced calling service comprises a conference call service (FIG. 6C, column 40 lines 39-43, column 231 lines 37-44) referenced by Off Switch Services 630 including conference calling as an off switch service. Elliott teaches at least a portion of said first media stream accepted by said interactive response process and said media stream provided in response to said first media stream (FIG. 6C) referenced by the first media stream between Gateway Site 110 and Calling Card IVR 632, comprises an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to a desired communication device with which said first communication device is to communicate (column 42 lines 56-59, column 229 lines 8-25) referenced by IVR operator services inclusive of line hunting so the call is re-routed to a different terminating called number. Elliott teaches said node in said asynchronous network other than said interactive response process is associated with a conference call party (column 230 lines 22-32) referenced by IVR operator service of three-way calling for conferencing. Elliott teaches

the node in said asynchronous network other than said interactive response process (FIG. 2A-2) referenced by terminating Gateway Site 108, comprises a second network interface providing interfacing of a second communication device to said asynchronous network (FIG. 2A-2) referenced by terminating Gateway Site 108 connected to asynchronous Data Network 112, wherein said second network interface includes a processor (FIG. 2A-2) referenced by processor Network Access Server 228, adapted to controllably direct a second media stream associated with said second communication device to said first network interface under control of said processor of said interactive response process (FIG. 24A) referenced by Soft Switch Site 106 controlling connection of first media stream from GWS 110 to second media stream of GWS 108 for a called party number termination at telephone 102. Elliott teaches said processor of said first network interface is adapted to controllably direct a second media stream associated with said first communication device to a node in said asynchronous network (FIG. 24A) referenced by first network device GWS 110 separating the media stream into 2414 for data and 2400 for control signals using the Carrier Facility 130 connected to communication device Telephone 120 associated to the GWS 110, wherein said processor of said interactive response process provides said control signals to said processor of said first network interface (FIG. 24A) referenced by Central Soft Switch Site 106 using SS7 GW to process control signals 2400 with GWS 110, to thereby direct at least a portion of said first media stream to a first node and at least a portion of said second media stream to a second node wherein said first node is said node in said asynchronous network other than said interactive response process (FIG. 24A)



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referenced by the first media stream of control signals 2400 routed via Central Soft Switch Site 106 Soft Switch unit 304 through Data Network 112 to node Western Soft Switch Site 104 Soft Switch 204 to second media stream control signals to GWS 108. Elliott teaches said control signals provided to said first network interface are operable to cause said first network interface to replicate at least a portion of said first media stream to thereby provide at least a portion of said second media stream (FIG. 24A, column 230 lines 22-32) referenced by three-way calling feature using signaling channel 2400 such that GWS 110 replicates the first media stream to be transmitted to the a second communication device Telephone 102 as well as a third communication device Telephone 122.

Elliott teaches said second node comprises said interactive response process (FIG. 6C) referenced by Gateway Site 110 coupled to Interactive Voice Response unit 632 where the Gateway Site is obviously the same structure as Gateway Site 108. Elliott teaches said second node comprises a node in said asynchronous network other than said interactive response process and a node in said asynchronous network other than said first node (FIG. 24A) referenced by second node of GWS 108 connected to asynchronous Data Network 112.

Claims 18-30, Elliott teaches said first network interface comprises a network gateway device (FIG. 2A-2) referenced by Gateway Site 110. Elliott teaches a first communication device comprises a telephone (FIG. 2A-2) referenced by telephone 120. Elliott teaches said first communication device comprises a multimedia personal

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computer (FIG. 6D, FIG. 70B, column 43 lines 55-62, column 58 lines 48-62) referenced by client computer system 7008 representing IP client 660 using H.323 to make point-to-point calls. Elliott teaches first communication device comprises a gatekeeper (FIG. 58B, FIG. 60, column 44 lines 65-67, column 45 lines 1-33) referenced by Gatekeeper 5808 as part of the Gateway H.323 Zone. Elliott teaches first media stream comprises a real-time protocol media stream (FIG. 2B) referenced by Real Time Protocol stream between Trunking Gateway 234 and Trunking Gateway 232. Elliott teaches said processor of said first network interface and said processor of said interactive response process establish a first control structure there between (FIG. 24A) referenced by control signals 2400 between Carrier Facility 130 of GWS 110 and Central Soft Switch Site 106, wherein said call control structure is retained between said processor of said first network interface and said processor of said interactive response process when said at least a portion of said first media stream is directed to said node in said asynchronous network other than said interactive response process (FIG. 24A) referenced by Soft Switch 304 maintaining signaling control with GWS 110 to direct GWS 110 media stream 2414 containing data via Data Network 112 to node of GWS 108. Elliott teaches first control structure provides out of band signaling between said first communication device and said interactive response process (FIG. 6C, FIG. 24A) referenced by use of out of band SS7 Signaling by SS7 GW unit 308 between Carrier Facility 130 of Telephone 120 with Calling Card Interactive Voice Response Unit 632. Elliott teaches said out of band signaling provides information with respect to routing the first media stream to said node in said asynchronous network other than said interactive

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response process (FIG. 6C, column 40 lines 58-65) referenced by out of band signaling digit information used by soft switch in a request to SCP 214b for translation of digits to a destination number for routing. Elliott teaches said interactive response process is coupled to said asynchronous network as a network core device (FIG. 6C) referenced by the combination of network core device Gateway Site 110 incorporating Calling Card IVR 632 with the Gateway Site 110 coupled to the asynchronous Data Network 112. Elliott teaches said interactive response process is coupled to said asynchronous network via a network core device (FIG. 6C) referenced by interactive response process within IVR 632 coupled to asynchronous network Data Network 112 via a network core device Gateway Site 110. Elliott teaches said network core device is a gatekeeper (FIG. 6C, FIG. 58B, column 45 lines 3-33) referenced by Gatekeeper 5808 function incorporated within the core device Gateway Site 110. Elliott teaches said interactive response process comprises interactive voice response functionality (FIG. 6C, column 42 lines 56-59) referenced by Calling Card Interactive Voice Response unit 632. Elliott teaches said interactive response process comprises interactive multimedia response functionality (column 227 lines 9-15) referenced by multimedia web interface in place of an IVR interface.

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Claims 31-51 and 53-62, are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott.

Claim 31, Elliott teaches a method for providing enhanced calling services (FIG 6C, column 42 lines 56-65, column 223 lines 9-12) referenced by IVR for enhanced operator services, comprising interfacing a first communication device to an asynchronous network (FIG. 1) referenced by Telephone 120 connecting to asynchronous Data Network 112, interfacing an interactive response process to said asynchronous network (FIG. 6C) referenced by Calling Card IVR 632 connecting to Data Network 112 via Gateway Site 110, directing a first media stream associated with said first communication device to said interactive response process (FIG. 6C, FIG. 24A, column 224 lines 19-23) referenced by connecting Telephone 120 via GWS 110 to Central Soft Switch Site 106 for the Calling Card IVR 632 to obtain credit card information, accepting said first media stream by said interactive response process (FIG. 6C) connecting telephone to Calling Card IVR 632, generating a second media stream by said interactive response process responsive to said first media stream ( FIG. 24A, column 224 lines 35-38) referenced by using data from IVR to connect a call where first media stream of Telephone 120 is connected to second media stream of Telephone 102 controlled by Central Soft Switch Site 106, directing said second media stream to said first communication device (FIG. 24A) referenced by media stream connection 2414 between Telephone 120 and Telephone 102, establishing a signaling channel between said first communication device and soft switch discrete from said first and second

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media streams (FIG. 24A) referenced by signaling channel 2400 separate from data media stream to establish the call, accepting information from said first communication device via said signaling channel (FIG. 24A, column 20 lines 5-13) referenced by use of SS7 GW to obtain signaling information, controlling directing of said first media stream by said interactive response process responsive to said accepted information wherein control of said first media stream is independent of control of said signaling channel (FIG. 24A) referenced by use of Soft Switch 304 use of IVR information to set up SS7 signaling information 2400 to establish first media stream and second media stream connection 2414.

Elliott does not teach IVR is adapted to utilize packet network protocols. Elliott teaches Soft Switch is adapted to directly utilize packet network protocols (FIG. 6C) referenced by Soft Switch 204 using Internet Protocol Device Control in communication with the Data Network 112.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Network IVR unit and Calling Card IVR unit into the Soft Switch processor of Elliott for the purpose of consolidating functions and ease of maintenance.

Claims 32-46, Elliott teaches determining the type of enhanced calling services to be performed (column 42 lines 56-59, column 223 lines 9-12) referenced by a set of IVR operator services the customer may chose from. Elliott teaches said determined type of enhanced calling services is selected from the group consisting of a prepaid calling card

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service (column 223 lines 13-16) referenced by prepaid calling card services, a postpaid calling card service (column 224 lines 20-23) referenced by a credit card for postpaid charging of call, and a collect calling service (column 223 lines 9-12) referenced by IVR operator service of collect calls. Elliott teaches said determined type of enhanced calling services is selected from the group consisting of an international callback service (column 224 lines 14-18, column 233 lines 24-25) referenced by automatic callback service with international operator services, a one number service (column 226 lines 32-40) referenced by one-number services, a voice activated dialing service, and a conferencing service (column 233 lines 37-43) referenced by conferencing services are all services possible via IVR. Elliott teaches said enhanced calling services comprises a call payment service (column 224 lines 19-38) referenced by calling cards using credit cards which constitute a call payment service.

Elliott teaches said first media stream accepted by said interactive response process and said second media stream generated in response thereto (FIG. 24A) referenced by IVR of Central Soft Switch Site 106 directing connection of first media stream from GWS 110 to second media stream from GWS 108, comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to payment of a call (FIG. 6C) referenced by Calling Card IVR 632 to obtain calling card payment information.

Elliott teaches said first media stream accepted by said interactive response process and said second media stream provided in response thereto comprise an interactive dialogue between said first communication device and said interactive response

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process (FIG. 2A-2, FIG. 6C) referenced by Telephone 120 connected to Calling Card Interactive Voice Response unit 632, including dialogue with respect to a desired communication device with which said first communication device is to communicate (FIG. 2A-2, column 224 lines 20-46) referenced by connecting the call to a destination number obtained from the IVR dialogue with the second media stream determined by the destination number.

Elliott teaches said controlling directing of said first media stream by said interactive response process comprises redirecting said first media stream from said interactive response process to a second communication device to said asynchronous network while maintaining said signaling channel (FIG. 24A) referenced by the redirected connection between first media stream 2410 of Telephone 120 and second media stream 2402 of Telephone 102 while signaling channel 2400 is maintained.

Elliott teaches said second communication device is associated with a called party (FIG. 24A) referenced by Telephone 102 being the destination called party.

Elliott teaches said redirecting said first media stream comprises directing a third media stream associated with said second communication device to said first communication device (FIG. 24A) referenced by the signaling stream of second communication device going to SS7 GW 208 which is associated to the connection of the first communication device.

Elliott teaches said signaling channel is retained between said first communication device and said interactive response process when said first media stream is redirected (column 225 lines 4-7) referenced by the ability of the originating caller to re-originate a

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call to another number signifying the maintenance of the signaling channel in order to re-originate the call.

Elliott teaches said signaling channel provides out of band signaling between said first communication device and said interactive response process (FIG. 24A) referenced by signaling channel 2400 connecting to out of band SS7 GW 308.

Elliott teaches said out of band signaling provides information with respect to redirecting the first media stream (FIG. 6C, column 40 lines 58-65) referenced by out of band signaling digit information used by soft switch in a request to SCP 214b for translation of digits to a destination number for routing.

Elliott teaches said call payment service comprises a prepaid calling service (column 42 lines 56-59, column 223 lines 13-16) referenced by prepaid calling card service using IVR for operator services.

Elliott teaches said call payment service comprises a postpaid calling service (column 224 lines 19-22) referenced by calling card service through the use of a credit card which is a method of post payment.

Elliott teaches said call payment service comprises a collect calling service (column 42 lines 56-59, column 223 lines 9-12) referenced by IVR operator services including collect calls.

Claims 47-51 and 53, Elliott teaches said enhanced calling service comprises a conference call service (FIG. 6C, column 40 lines 39-43, column 231 lines 37-44)



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referenced by Off Switch Services 630 including conference calling as an off switch service.

Elliott teaches said first media stream accepted by said interactive response process and said second media stream provided in response thereto comprise an interactive dialogue between said first communication device and said interactive response process (FIG. 2A-2, FIG. 6C) referenced by Telephone 120 connected to Calling Card Interactive Voice Response unit 632, including dialogue with respect to a desired communication device with which said first communication device is to communicate (FIG. 2A-2, column 224 lines 20-46) referenced by connecting the call to a destination number obtained from the IVR dialogue with the second media stream determined by the destination number.

Elliott teaches said controlling directing of said first media stream by said interactive response process comprises directing said first media stream to a second communication device interfaced to said asynchronous network (FIG. 24A) referenced by Central Soft Switch Site 106 controlling connection of the first media stream 2410 through asynchronous Data Network 112 to second media stream 2402 to communication device 102.

Elliott teaches said second communication device is associated with a conference party (column 230 lines 22-32) referenced by Three-Way Calling such that the second communication device is a conference party. Elliott teaches said directing said first media stream to a second communication device comprises signaling an asynchronous network interface associated with said first communication device to replicate said first

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media stream to thereby provide a first replication of said first media stream and a second replication of said first media stream wherein said first replication of said first media stream is directed to said second communication device (FIG. 24A, column 230 22-32) referenced by the signaling channel 2400 used to establish three-way conference calling where the GWS 110 replicates the media stream for transmission to second and third communication device Telephones. Elliott teaches said second replication of said first media stream is directed to a third communication device interfaced to said asynchronous network (FIG. 24A, column 230 22-32) referenced by the signaling channel 2400 used to establish three-way conference calling where the GWS 110 replicates the media stream for transmission to second and third communication device Telephones.

Claims 54-62, Elliott teaches said interfacing said first communication device to said asynchronous network comprises coupling said first communication device to a network gateway device (FIG. 2A-2) referenced by first communication device Telephone 120 coupled to a network gateway device Gateway Site 110 to interface with asynchronous Data Network 112. Elliott teaches said first communication device comprises a multimedia personal computer (FIG. 6D, FIG. 70B, column 43 lines 55-62, column 58 lines 48-62) referenced by client computer system 7008 representing IP client 660 using H.323 to make point-to-point calls. Elliott teaches said first communication device comprises a gatekeeper (FIG. 58B, FIG. 60, column 44 lines 65-67, column 45 lines 1-

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33) referenced by Gatekeeper 5808 as part of the Gateway H.323 Zone. Elliott teaches said first media stream comprises a real-time protocol media stream (FIG. 2B) referenced by Real Time Protocol stream between Trunking Gateway 234 and Trunking Gateway 232. Elliott teaches said interactive response process is coupled to said asynchronous network as a network core device (FIG. 6C) referenced by the combination of network core device Gateway Site 110 incorporating Calling Card IVR 632 with the Gateway Site 110 coupled to the asynchronous Data Network 112. Elliott teaches said interactive response process is coupled to said asynchronous network via a network core device (FIG. 6C) referenced by interactive response process within IVR 632 coupled to asynchronous network Data Network 112 via a network core device Gateway Site 110. Elliott teaches said network core device is a gatekeeper (FIG. 6C, FIG. 58B, column 45 lines 3-33) referenced by Gatekeeper 5808 function incorporated within the core device Gateway Site 110. Elliott teaches said interactive response process comprises interactive voice response functionality (FIG. 6C, column 42 lines 56-59) referenced by Calling Card Interactive Voice Response unit 632. Elliott teaches said interactive response process comprises interactive multimedia response functionality (column 227 lines 9-15) referenced by multimedia web interface in place of an IVR interface.

Claims 63-81, are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott.

Claim 63, Elliott teaches a method for providing call payment services (FIG. 6C, column 42 lines 55-59, column 224 lines 19-22) referenced by a Calling Card IVR which requests payment information via a calling card identification or credit card identification, comprising interfacing a first communication device to an asynchronous network (FIG. 1, column 5 lines 41-48) referenced by Telephone 120 connected to Gateway Site 110 interfacing to asynchronous Data Network 112 which is an IP based network, interfacing an interactive response process to said asynchronous network (FIG. 6C) referenced by Calling Card IVR 632 connecting to Data Network 112 via Gateway Site 110, directing a first media stream associated with said first communication device to said interactive response process (FIG. 6C, FIG. 24A, column 224 lines 19-23) referenced by connecting Telephone 120 via GWS 110 to Central Soft Switch Site 106 for the Calling Card IVR 632 to obtain credit card information, accepting said first media stream by said interactive response process (FIG. 6C) connecting telephone to Calling Card IVR 632, generating a second media stream by said interactive response process responsive to said first media stream ( FIG. 24A, column 224 lines 35-38) referenced by using data from IVR to connect a call where first media stream of Telephone 120 is connected to second media stream of Telephone 102 controlled by Central Soft Switch Site 106, directing said second media stream to said first communication device wherein said first media stream accepted by said interactive response process and said second media stream directed to said first communication device (FIG. 24A, column 224 lines 35-38)

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referenced by using data from IVR to connect a call where first media stream of Telephone 120 is connected to second media stream of Telephone 102 controlled by Central Soft Switch Site 106, comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to payment of a call and a desired second communication device with which said first communication device is to communicate (column 42 lines 56-59, column 229 lines 8-25) referenced by calling card IVR operator services inclusive of line hunting so the call is re-routed to a different terminating called number, establishing a signaling channel between said first communication device and a soft switch discrete from said first and second media streams (FIG. 24A) referenced by signaling channel 2400 separate from data media stream to establish the call, accepting information from said first communication device via said signaling channel in accordance with said dialogue (FIG. 24A, column 4 lines 42-48) referenced by establishment of call between first communication device Telephone 120 to second communication device Telephone 102 based on the termination number obtained from the IVR unit to establish the signaling connection 2400 over the Data Network 2414, and redirecting as a function of said accepted information said first media stream from said interactive response process to said second communication device interfaced to said asynchronous network while maintaining said signaling channel (FIG. 24A) referenced by using IVR data towards establishment of call between first communication device Telephone 120 on data stream 2410 to second communication device Telephone 102 on data stream 2402 via Data Network 2414 while maintaining separate signaling connection 2400.

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Elliott does not teach IVR is adapted to utilize packet network protocols. Elliott teaches Soft Switch is adapted to directly utilize packet network protocols (FIG. 6C) referenced by Soft Switch 204 using Internet Protocol Device Control in communication with the Data Network 112.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Network IVR unit and Calling Card IVR unit into the Soft Switch processor of Elliott for the purpose of consolidating functions and ease of maintenance.

Claims 64-75, Elliott teaches said interactive response process monitors at least one aspect of said first media stream redirected to said second communication device (FIG. 24A, column 225 lines 4-7) referenced by the IVR of the Soft Switch Site 106 for monitoring of the call for re-origination feature of the active call for subsequent placement of another call to another destination. Elliott teaches said monitored at least one aspect comprises a call duration (column 42 lines 56-59, column 223 lines 13-16, column 225 lines 8-24) referenced by prepaid calling card service using IVR for operator services wherein the soft switch monitors the duration of the call for the limit of the value available on the prepaid calling card. Elliott teaches said monitoring is accomplished at least in part though signaling via said signaling channel (FIG. 24A) referenced by the signaling stream 2400 of the first communication device which is monitored to control the call. Elliott teaches said redirecting said first media stream comprises directing a third media stream associated with said second communication device to said first

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communication device (column 230 lines 22-32) referenced by IVR operator service of three-way calling for conferencing which directs a third media stream to connect a third communication device to the media streams associated to the first and second communication devices. Elliott teaches said signaling channel provides out of band signaling between said first communication device and said interactive response process (FIG. 6C, FIG. 24A) referenced by use of out of band SS7 Signaling by SS7 GW unit 308 between Carrier Facility 130 of Telephone 120 with Calling Card Interactive Voice Response Unit 632. Elliott teaches accepting additional information from said first communication device via said signaling channel during a time in which said first media stream is redirected to said second communication device and redirecting as a function of said accepted additional information said first media stream from said second communication device to said interactive response process (column 230 lines 22-32) referenced by IVR operator service of three-way calling for conferencing which obtains information to from the first communication device Telephone 120 to direct a third media stream to connect a third communication device to the media streams associated to the first and second communication devices. Elliott teaches accepting by said interactive response process said first media stream redirected from second communication device generating a third media stream by said interactive response process responsive to said first media stream and directing said third media stream to said first communication device wherein said first media stream accepted by said interactive response process and said third media stream directed to said first communication device comprise an interactive dialogue between said first

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communication device and said interactive response process (column 225 lines 4-7) referenced by re-origination feature where the first Telephone 120 terminates the connection to the second media stream to Telephone 102 and is reconnected to the IVR by a third media stream to obtain information to place another call. Elliott teaches said dialogue includes dialogue with respect to payment of an additional call (column 225 lines 4-27) referenced by re-origination call feature requesting the authorization code again to determine the payment based on usage limit. Elliott teaches said dialogue includes dialogue with respect to a desired third communication device with which said first communication device is to communicate (column 225 lines 4-27) referenced by re-origination call feature in which a new call is placed to connect a third communication device Telephone based on the information received from the dialogue between the first communication device Telephone 120 and the IVR. Elliott teaches said call payment service comprises a prepaid calling service (column 223 lines 13-16, column 226 line 31) referenced by IVR operator services including prepaid calling card service. Elliott teaches said call payment service comprises a postpaid calling service (column 224 lines 19-22) referenced by calling card service through the use of a credit card which is a method of post payment. Elliott teaches said call payment service comprises a collect calling service (column 42 lines 56-59, column 223 lines 9-12) referenced by IVR operator services including collect calls.



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Claims 76-81, Elliott teaches said interfacing said first communication device to said asynchronous network comprises coupling said first communication device to a network gateway device (FIG. 2A-2) referenced by first communication device Telephone 120/ coupled to a network gateway device Gateway Site 110 to interface with asynchronous Data Network 112. Elliott teaches said first communication device comprises a multimedia personal computer (FIG. 6D, FIG. 70B, column 43 lines 55-62, column 58 lines 48-62) referenced by client computer system 7008 representing IP client 660 using H.323 to make point-to-point calls. Elliott teaches said first media stream comprises a real-time protocol media stream (FIG. 2B) referenced by Real Time Protocol stream between Trunking Gateway 234 and Trunking Gateway 232. Elliott teaches said interactive response process is coupled to said asynchronous network as a network core device (FIG. 6C) referenced by the combination of network core device Gateway Site 110 incorporating Calling Card IVR 632 with the Gateway Site 110 coupled to the asynchronous Data Network 112. Elliott teaches said interactive response process is coupled to said asynchronous network via a network core device (FIG. 6C) referenced by interactive response process within IVR 632 coupled to asynchronous network Data Network 112 via a network core device Gateway Site 110. Elliott teaches said network core device is a gatekeeper (FIG. 6C, FIG. 58B, column 45 lines 3-33) referenced by Gatekeeper 5808 function incorporated within the core device Gateway Site 110.

Claims 82-83, 86-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott.

Claim 82, Elliott teaches a method for providing call conference calling services (FIG. 6C, column 231 lines 37-44) referenced by using a Calling Card IVR to establish a six-way conference call, comprising interfacing a first communication device to an asynchronous network (FIG. 1, column 5 lines 41-48) referenced by Telephone 120 connected to Gateway Site 110 interfacing to asynchronous Data Network 112 which is an IP based network, interfacing an interactive response process to said asynchronous network (FIG. 6C) referenced by Calling Card IVR 632 connecting to Data Network 112 via Gateway Site 110, directing a first media stream associated with said first communication device to said interactive response process (FIG. 6C, FIG. 24A, column 224 lines 19-23) referenced by connecting Telephone 120 via GWS 110 to Central Soft Switch Site 106 for the Calling Card IVR 632 to obtain credit card information, accepting said first media stream by said interactive response process (FIG. 6C) connecting telephone to Calling Card IVR 632, generating a second media stream by said interactive response process responsive to said first media stream ( FIG. 24A, column 224 lines 35-38) referenced by using data from IVR to connect a call where first media stream of Telephone 120 is connected to second media stream of Telephone 102 controlled by Central Soft Switch Site 106, directing said second media stream to said first communication device wherein said first media stream accepted by said interactive

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response process and said second media stream directed to said first communication device (FIG. 24A, column 224 lines 35-38) referenced by using data from IVR to connect a call where first media stream of Telephone 120 is connected to second media stream of Telephone 102 controlled by Central Soft Switch Site 106, comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect a desired second communication device with which said first communication device is to communicate (column 42 lines 56-59, column 229 lines 8-25) referenced by calling card IVR operator services inclusive of line hunting so the call is re-routed to a different terminating called number, and a desired third communication device with which said first communication device is to communicate (FIG. 6C, column 230 lines 22-32) referenced by using a Calling Card IVR to establish three-way calling to connect a desired third communication device Telephone to the first and second media streams, establishing a signaling channel between said first communication device and a soft switch discrete from said first and second media streams (FIG. 24A) referenced by signaling channel 2400 separate from data media stream to establish the call, accepting information from said first communication device via said signaling channel in accordance with said dialogue (FIG. 24A, column 4 lines 42-48) referenced by establishment of call between first communication device Telephone 120 to second communication device Telephone 102 based on the termination number obtained from the IVR unit to establish the signaling connection 2400 over the Data Network 2414, signaling an asynchronous network interface associated with said first communication device to replicate said first media

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stream to thereby provide at least a first replication of said first media stream and a second replication of said first media stream wherein said first replication of said first media stream is directed to said second communication device and said second replication of said first media stream is directed to said third communication device (FIG. 24A, column 230 22-32) referenced by the signaling channel 2400 used to establish three-way conference calling where the GWS 110 replicates the media stream for transmission to a second and third communication device, and terminating direction of said first media stream to said interactive response process while maintaining said signaling channel (FIG. 6C, FIG. 24A) referenced by the first communication device Telephone 120 disconnecting the call to the Calling Card IVR 632 when the necessary information is obtained while the signaling channel 2400 is maintained for the active connecting call to the second communication device Telephone 102.

Elliott does not teach IVR is adapted to utilize packet network protocols. Elliott teaches Soft Switch is adapted to directly utilize packet network protocols (FIG. 6C) referenced by Soft Switch 204 using Internet Protocol Device Control in communication with the Data Network 112.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Network IVR unit and Calling Card IVR unit into the Soft Switch processor of Elliott for the purpose of consolidating functions and ease of maintenance.

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Claims 83 and 86-92, Elliott teaches said second communication device is associated with a conference party and wherein said third communication device is associated with a conference party (FIG. 24A, column 230 22-32) referenced by the signaling channel 2400 used to establish three-way conference calling party with a first communication device Telephone 120 connected to second communication device 102 connected to third communication device 122. Elliott teaches said interfacing said first communication device to said asynchronous network comprises coupling said first communication device to a network gateway device (FIG. 2A-2) referenced by first communication device Telephone 120 coupled to a network gateway device Gateway Site 110 to interface with asynchronous Data Network 112. Elliott teaches said first communication device comprises a multimedia personal computer (FIG. 6D, FIG. 70B, column 43 lines 55-62, column 58 lines 48-62) referenced by client computer system 7008 representing IP client 660 using H.323 to make point-to-point calls. Elliott teaches said first communication device comprises a gatekeeper (FIG. 58B, FIG. 60, column 44 lines 65-67, column 45 lines 1-33) referenced by Gatekeeper 5808 as part of the Gateway H.323 Zone. Elliott teaches said first media stream comprises a real-time protocol media stream (FIG. 2B) referenced by Real Time Protocol stream between Trunking Gateway 234 and Trunking Gateway 232. Elliott teaches said interactive response process is coupled to said asynchronous network as a network core device (FIG. 6C) referenced by the combination of network core device Gateway Site 110 incorporating Calling Card IVR 632 with the Gateway Site 110 coupled to the asynchronous Data Network 112. Elliott teaches said interactive response process is coupled to said asynchronous

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network via a network core device (FIG. 6C) referenced by interactive response process within IVR 632 coupled to asynchronous network Data Network 112 via a network core device Gateway Site 110. Elliot teaches said network core device is a gatekeeper (FIG. 6C, FIG. 58B, column 45 lines 3-33) referenced by Gatekeeper 5808 function incorporated within the core device Gateway Site 110.

### ***Allowable Subject Matter***

3. Claims 52, 84, 85 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Citation of Prior Art***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 5590186 Liao discloses a system for redirecting a telephone call with call merging.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 703-305-8708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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